

Notice of Allowability

Application No.

10/735,653

Examiner

Ives Wu

Applicant(s)

SU ET AL.

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/18/07.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 12/19/06.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

(1). Applicants' Amendments, Remarks and corrected Drawing filed on March 16, 2007 have been received.

Claim 1 is amended.

The 112 2nd rejections for claims 1-10 in prior Office Action dated 12/19/06 are removed accordingly.

Allowable Subject Matter

(2). **Claims 1 - 16** are allowed.

Reasons for Allowance

(3). The following is an examiner's statement of reasons for allowance:

Instant application is allowable in view of the following prior art references.

The instant application includes two main subsystems being connected, controlled by single central controller. The 1st subsystem is the stripper condenser, the other subsystem is storage buffer tanks. The closest prior art reference identified by Examiner is Giroux (US04230533) – Giroux (US04230533) discloses the control system for the overhead product of fractionation method as shown in Figure 1, a level controller 64, a condenser 55, pump unit 57, analyzer 60 two control valves 58, 62. The difference between Giroux (US04230533) and applicants' invention is 1) the controller, where the applicants' control is single main controller, and prior art Giroux (US04230533) uses several local controller to perform the balance of the process, and 2) the analyzer of Giroux (US04230533) may be used as a concentration detector as claimed by applicants. However, the analyzer is connected to control valve loop, not connected to the condenser storage tank 55 as claimed by applicants, 3) the level controller of Giroux (US04230533) controls the control valve 52, instead of pump 57, 4) the buffer tank as claimed by applicants is not in the disclosure of prior art Giroux (US04230533). The other related prior art references identified by Examiner is Skoglund (US06311711B1) – Skoglund (US06311711B1) discloses the method of regulating level in a buffer tank by means of inlet, outlet conduits, prior art Tsay et al (US06148838A) disclose automatic liquid drain system, as

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well as Farrell, Jr. et al (US03920550), they aim to prevent the overflow of any tank, however, Tsay et al (US06148838A) is for a array of tank **in parallel**, Skoglund (US06311711B1) controls the inlet flow and **no control on the outlet flow**, Farrell, Jr. et al (US03920550) teach the tanks in serial to prevent overflow, no indication of central control for the outlet flow pump, valve for each tank, where the applicants disclose the central control system with controls on inlet, outlet pumps valves and buffer tanks in serial. Accordingly, claims 1-16 are considered to be novel in view of above-stated reasons.

As of the date of this Notice of Allowability, the Examiner has not located or identified any reference that can be used singularly or in combination with another reference including those above-mentioned to render the present invention anticipated or obvious to one of ordinary skill in the art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Ives Wu

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Date: May 22, 2007

DUANE SMITH
PRIMARY EXAMINER

D. Smith
5-22-07



Application No.: 10/735,653
Examiner: WU, Ives J.
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REPLACEMENT SHEET

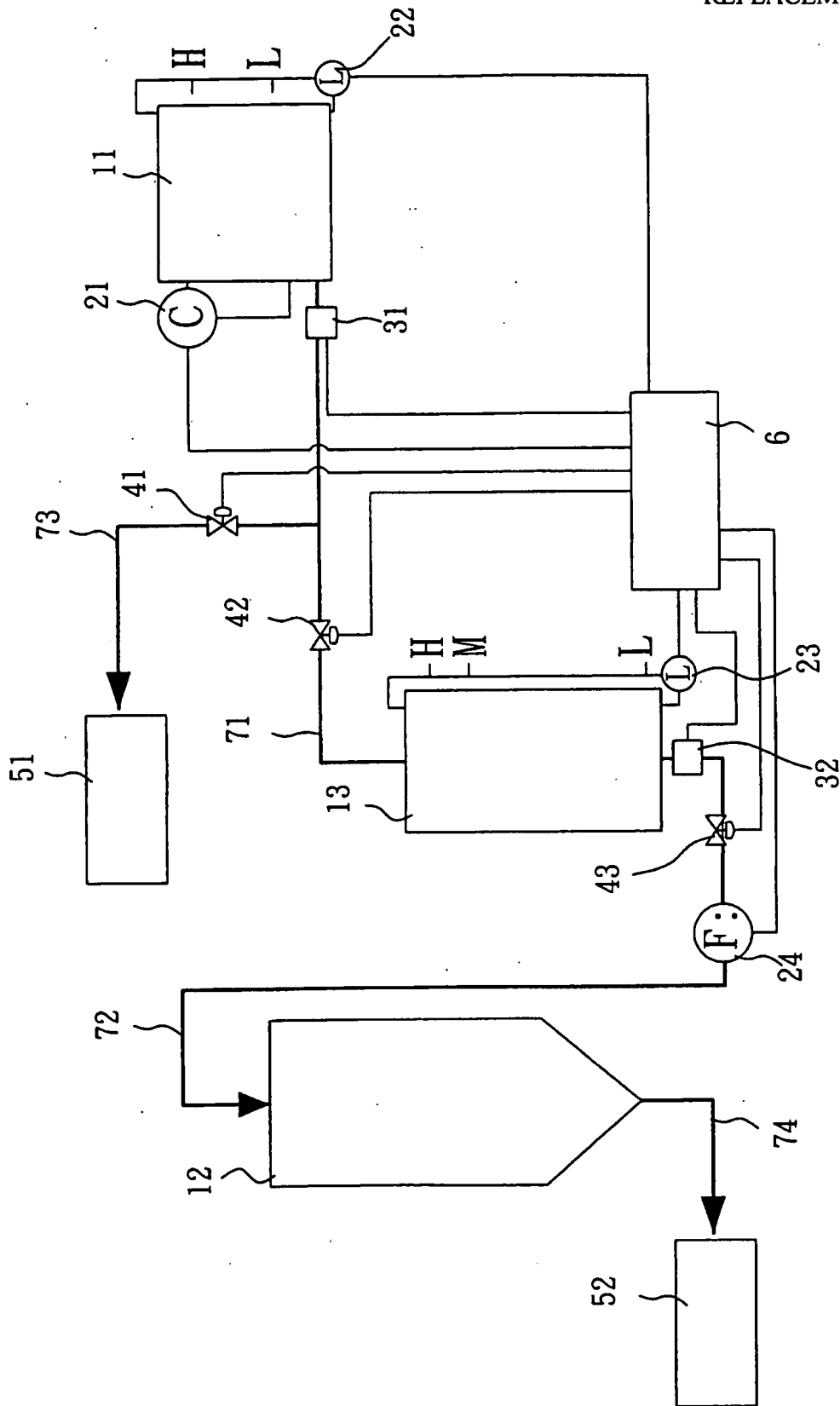


FIG. 1